Straight2Bank

TRANSACTION BANKING

Straight2Bank Universal Adaptor

The user's manual for the online mapping tool

Straight2Bank Access Channel Management
Version 2.6

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REVISIONS

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2.6	Included Reverse UA for Prior Day Bank Statements	Glenn Wee	06/07/2015

PURPOSE OF THE DOCUMENT

The objective of this document is to describe the purpose of the online mapping tool of Universal Adaptor, and the necessary steps required to carry though the definition of a new file format.

AUDIENCE

This document is intended to clients, implementation managers, support specialists and channel managers. It's the propriety of Standard Chartered and cannot be externally shared without consent.

CHAPTER 1: UNIVERSAL ADAPTOR AT GLANCE

1. Background

In the effort to better control their data and achieve process efficiency, companies have increasingly relied on information technology applications, especially Enterprise Resource Planning (ERP) and Web-based solution. As the need for more efficient integration between banks and their corporate clients has become more important than ever, three challenges are left to be addressed:

i. Corporate systems generate unstructured client-specific files such as comma-separated values (CSV) file, report, or spool, which are not "understandable" by banks systems, or are simply not rich enough to allow the banks to process the transaction;
ii. The existing systems at the bank's end are not flexible enough and do not exhaustively integrate all the existing files originated by all their corporate clients;
iii. Clients resist changing the file formats to accommodate bank's systems requirement as such a change can impact their daily operations and induce more cost.

Banks have tried to address these challenges by developing and deploying data converters at the client's end. These tools are designed to the convert and remap "unstructured" payment files in bank accepted formats before transmitting them to the bank either by Host to Host or internet banking. But, this approach represents a partial solution which involves consistent risks for banks.

The Universal Adapter project aims at addressing the challenges highlighted above, and allowing all the corporate clients of the banks to send any file format, from any application, to initiate a transaction at the lowest possible costs.

2. What is Universal Adaptor?

Universal Adaptor (UA) is an online mapping tool enabling clients to send instructions in their own formats through host-to-host and Web channels.

Through a newly designed Web graphical interface, Universal Adaptor helps define the customer's proprietary formats. Based on these definitions and their related template IDs, the system later accepts clients' transaction files, extracts the transaction instructions, and carries them over to a bank-specific format.

Universal Adaptor features:

- Comprehensive library comprising industry, ERP and Bank formats
- Easy online file mapping function through a rich and intelligent user interface
- Interoperability across Web and host-to-host channels
- Compliant with industry standard security and encryptions
- No installation at clients' premises in defining the file mapping

CHAPTER 2: GETTING STARTED

1. Prerequisites

Three items are required to for an effective definition of file format template:

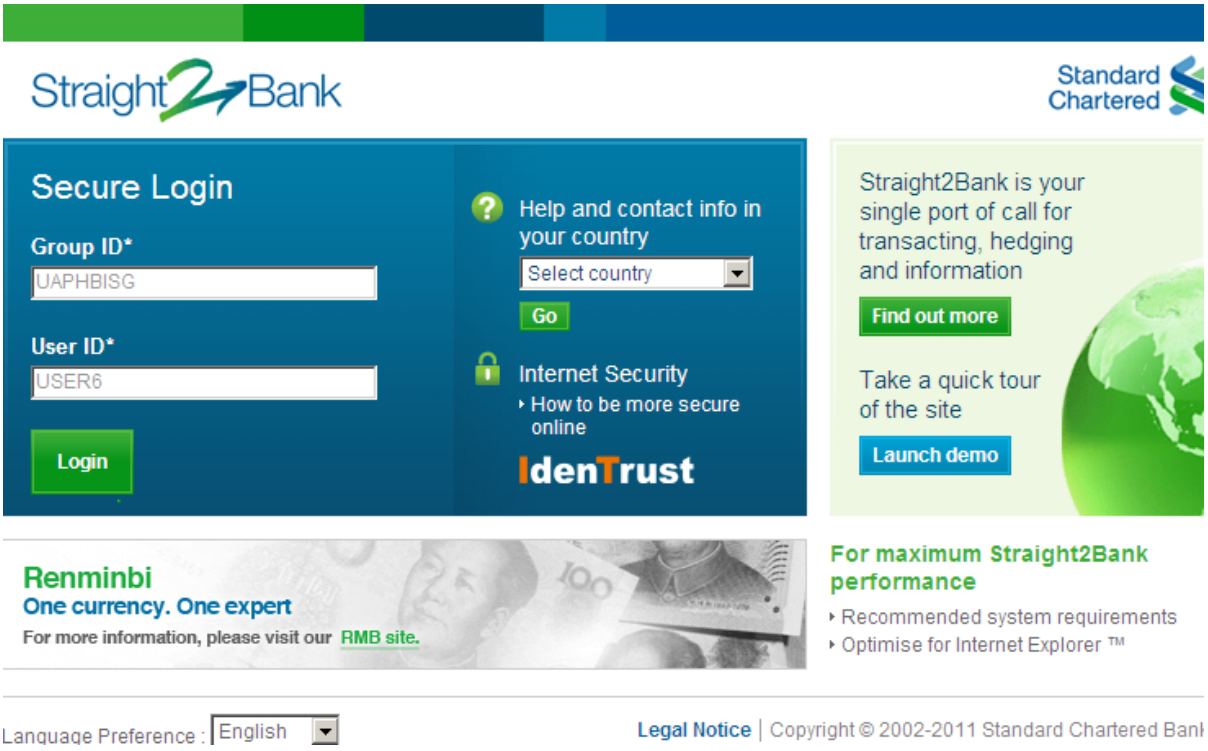
- **An access to Straight2Bank Web**
- **A format specification document to help understand the file format**
- **A sample file**

Universal Adaptor runs on Straight2Bank Web platform. For an optimal performance, the user should use a PC station meeting the following requirements:

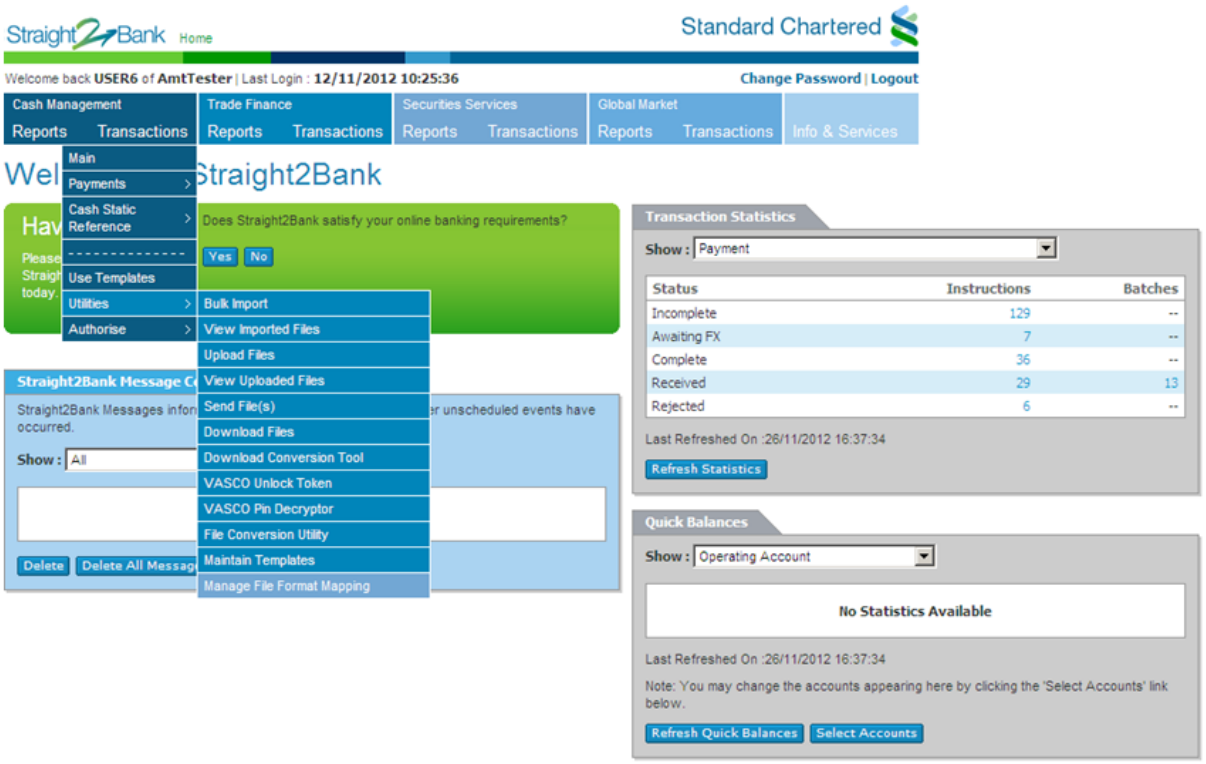
- **Operating System:** Windows 7 or Windows Vista* or Windows XP or Windows 2000 or Windows 98 (Second Edition). Apple Mac is supported with these WIN OS.
- **Processor:** 500 MHZ & Above.
- **RAM (memory):** 256 MB RAM & Above.
- **Video Display:** Minimum 800 x 600 resolution, 256-colour or higher.
- **Required Browser:** Microsoft IE7, IE8 and IE9 (with 128 bit strong encryption).
- **Browser Settings:** JavaScript Enabled.
- **Communications:** HTTPS (port 443)
- Java Runtime Environment 1.6.0_02.
- **Internet Connection:** 56.5 Kbps & Above, Broadband and dedicated connection is recommended.
- **Software:** Adobe Acrobat Reader 5.0 or above.
- **Hardware Requirements:** 1 Serial Com Port or 1 USB Port4 (Windows 98, ME, 2000, XP) or 1 PCMCIA slot CD-ROM drive for software installation.

2. Login

Universal Adaptor is available through the main Straight2Bank gateway. To access the only mapping tool, the user needs to have handily his **Group ID**, **User ID**, and **password** for Straight2bank.

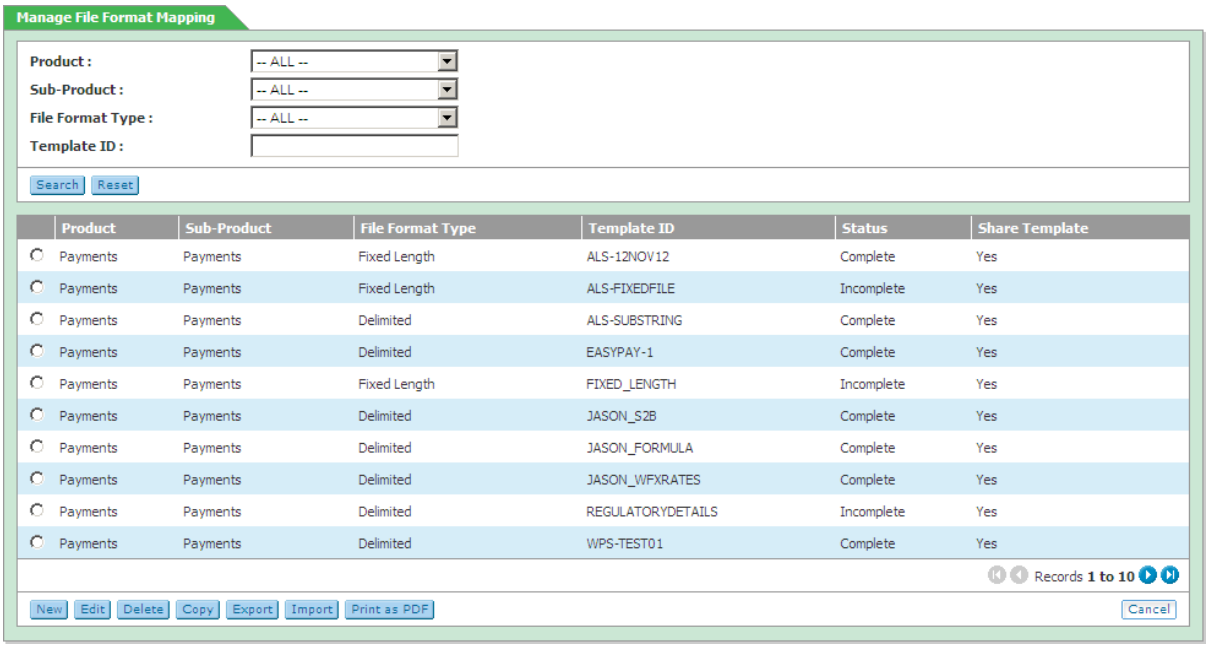


Since Universal Adaptor is currently only for payments' purpose, it is accessible through ***Cash Management → Transactions → Utilities → Manage File Format Mapping*** on the navigation menu.



3. Managing templates

Universal Adaptor initial screen offers the user the choice to work around existing templates, or create a new one.



To retrieve an existing template, the user can perform a search by populating the following parameters:

Search Parameters	Description
PRODUCT	Type of transaction or business function detailled in the file. This includes **Payments**, **Collection**, **Trade**, **iCAS**, etc. For now, only "**Payments**" option is available.
SUB-PRODUCT	Further categorization of the transaction/business function type. For "**Payments**" application, sub-categories are '**Payee**', '**Payments**', "**Payments with Multiple Fields**", and "**Payment Without Identifier**".
FILE FORMAT TYPE	Describes the way field are separated within the file. This can be either "**Delimited**", "**Fixed Length**", or "**Excel File**"
TEMPLATE ID	Unique identifier of the template.

By clicking on the Search (Search) and Reset (Reset) buttons, the user can respectively start a new search and bring all the search fields to their default values.

The list of existing templates is displayed at the bottom of the screen, and the left and right arrows at the bottom right corner help navigate from one set of 10 templates to another. For each template, the following information is displayed:

Display Field	Description
PRODUCT	Type of transaction or business function detailled in the file. This includes **Payments**, **Collection**, **Trade**, **iCAS**, etc. For now, only "**Payments**" option is available.
SUB-PRODUCT	Further categorization of the transaction/business function type. For "Payments" application, sub-categories are Payee, Payments, Payments with Multiple Fields, and Payment Without Identifier
FILE FORMAT TYPE	Describes the way field are separated within the file. This can be either "**Delimited**", "**Fixed Length**", or "**Excel File**"
TEMPLATE ID	Unique identifier of the template.
STATUS	Completeness of the template creation process. The tag "**Complete**" indicates the state of a template available and useable for data conversion. Otherwise, "Incomplete" means that the template is yet to be released and is saved as Draft.
SHARE TEMPLATE	"**Yes**" means, template is available for selection for all the user ids under the Group Id. "**No**" means it's available only to the user who created it.

Action buttons at the bottom left of the list of templates allow to perform further actions on the new/existing template.

3.1 Creating a new template

By clicking on the button 'New' (New), the user initiate the process of building a new template. The user is then brought to the "Template Details" screen where he can select the desired Product and Sub-Product and define the respective template attributes (see chapter 3 for more details).

3.2 Editing a template

To modify the definition and attributes of an existing template, the user must select the targeted template and press the button 'Edit' (Edit). The selected template is opened in "Template Details" screen where user can edit the template details (see chapter 3 for more details).

3.3 Deleting a template

By clicking the 'Delete' button (Delete), the user deletes the selected template and its related details. A dialog box will then be prompted for confirmation before the template is deleted.

3.4 Copying a template

Pressing the button 'Copy' (Copy) allows user to copy the selected template to the same group id. Once copied, the user is prompted with a dialog box to enter the template ID of the copy template.

3.5 Exporting a template

By clicking on the 'Export' button (Export), the selected template and its respective details can be exported as data file.

3.6 Importing a template

The 'Import' button (Import) allows the user to import template details into the system. Only the data file generated during "Export" process can be used

3.7 Printing as pdf

The user can also save the definition of a template on a PDF format file by clicking on the "Print as PDF" button (Print as PDF).

3.8 Cancelling

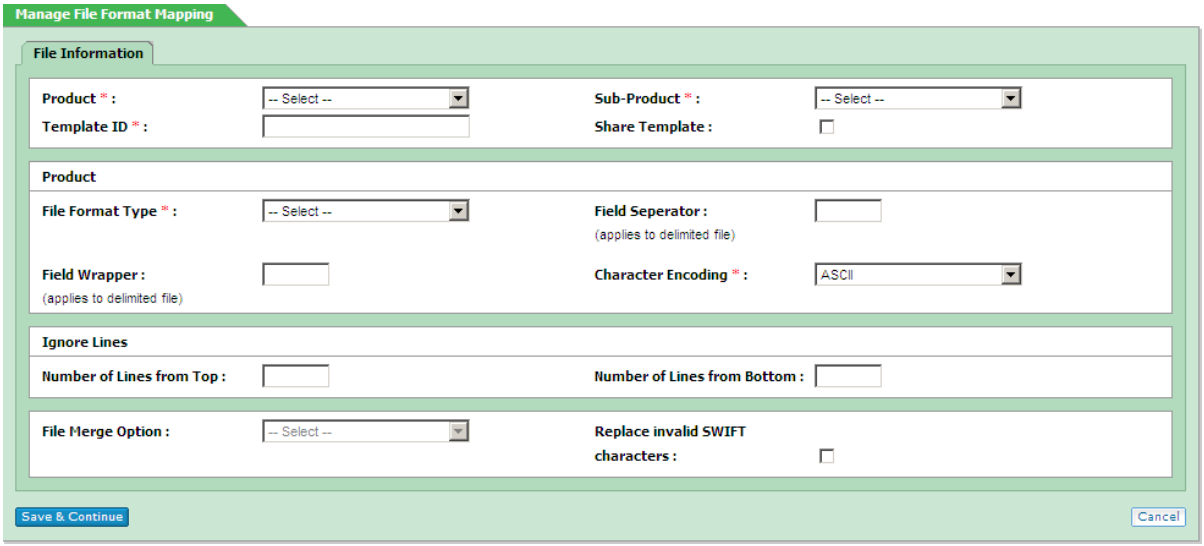
By pressing the button 'Cancel' (Cancel), no action is performed.

CHAPTER 3: DEFINING TEMPLATES

The template definition steps described in this chapter and in the next one are necessary to carry out the definition of a new template, or to amend an incomplete template. They are available on choosing the 'New' or 'Edit' on the "Manage File Format Mapping". The definition of a template is performed at two levels: the file level and the record level.

1. File level definition

The file level definition allows to capture the caracteristics of a file format to be mapped, and how data are organized within this file.



On Universal Adaptor, two types of file format can be mapped: fixed or delimited. Information required at the file level are as followed:

Field Name	Description
PRODUCT	Type of transaction or business function detailled in the file. This includes transactions such as payments, collections, Trade, iCAS, etc. For current release only "Payments" option is avalaible.
SUB-PRODUCT	Further categorization of the transaction type. For Payments products, the value available are: • **Payee:** To create mapping template for payee / beneficiary records • **Payments:** To create mapping template for payments containing payment and invoice records in the same file. • **Payments with Multiple Files:** To create template where payment and invoice records are in different files • **Payments without Identifier:** To create template where the file contains only payment records and no identifier. Every line in the file will be treated as one payment item.

TEMPLATE ID	A 20-characters unique identifier of the template. The uniqueness of the ID must be kept across both Universal Adaptor and File Converter Utility's tables.
SHARED TEMPLATE	If check box is ticked, the template created would be available for selection to all the user IDs under the current group ID. By default, the box its un-checked.
FILE FORMAT TYPE	Describe how fields coexist within the file. Options available are '**Delimited**', "**Fixed Length**", and "**Excel File"**.
FIELD SEPERATOR	Applicable to "Delimited" file format type only. It's the character that separates each field in the file. It can be <comma>, <tab>, <space>, etc.
FIELD WRAPPER	Mandatory for "Delimited" file format type only. It's the character that, when doubled, enfolds each field in the file. It can be <double quotes>, <single quotes>, etc. Defaulted to <double quotes>.
CHARACTER ENCODING	This input allows to define how the characters are encoded within the file format to be mapped. The default selection is ASCII and should be kept if the file does not contain any local language characters. Other options are Chinese Traditional (BIG5), Chinese Simplified (GBK), Thai, Japanese (Shift JIS).
IGNORE LINES	Indicates the number of lines to skip from the top and from the bottom of the input file during data conversion.
FILE MERGE OPTION	Applicable for "Payments with Multiple Files" sub-product only. It determines how the records on the invoice file is merged into the corresponding payment record on the payment file. Options are 'Sequence' or 'Indexed'.
REPLACE INVALID SWIFT CHARACTERS	When activated (check box ticked), the following invalid SWIFT characters in the input file will be replaced with a space: * ~ □ \ | ` ! @ # $ % _ { } [ ] ; " < > &. By default, the option is deactivated.

In ***Edit mode, the 'Product', 'SubProduct', "Template ID" & "File Type" are not editable***.

Click on Save & Continue button (Save & Continue) to futher proceed with the template creation.

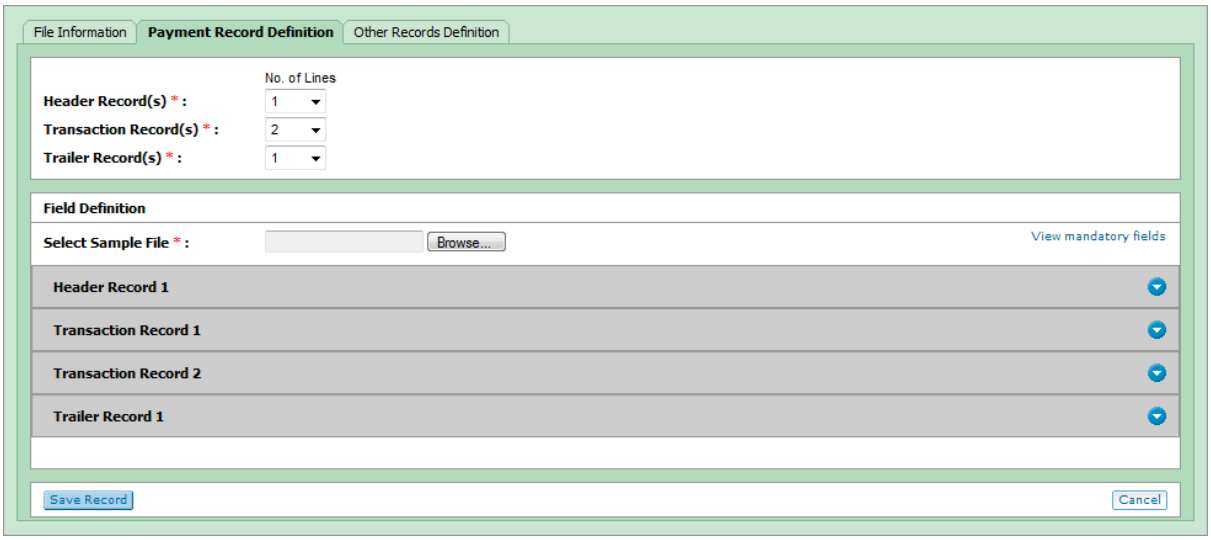
Criterias for Excel files

The Excel files compatible with Universal Adaptor are subject to the following restrictions:

- File extension can only be ***xls*** or ***xlsx***
- Originated from Microsoft Office version 97 and above
- Encoding UTF-8
- No macros allowed
- Only the first spreadsheet will be read by Universal Adaptor

2. Payment Record Definition for a delimited file type

The Payment Record Definition screen allows to define input file's data structure and specifications. As a first step, the user can define the internal structure by stating how many lines are needed for the header, the transactions, and the trailer's records.

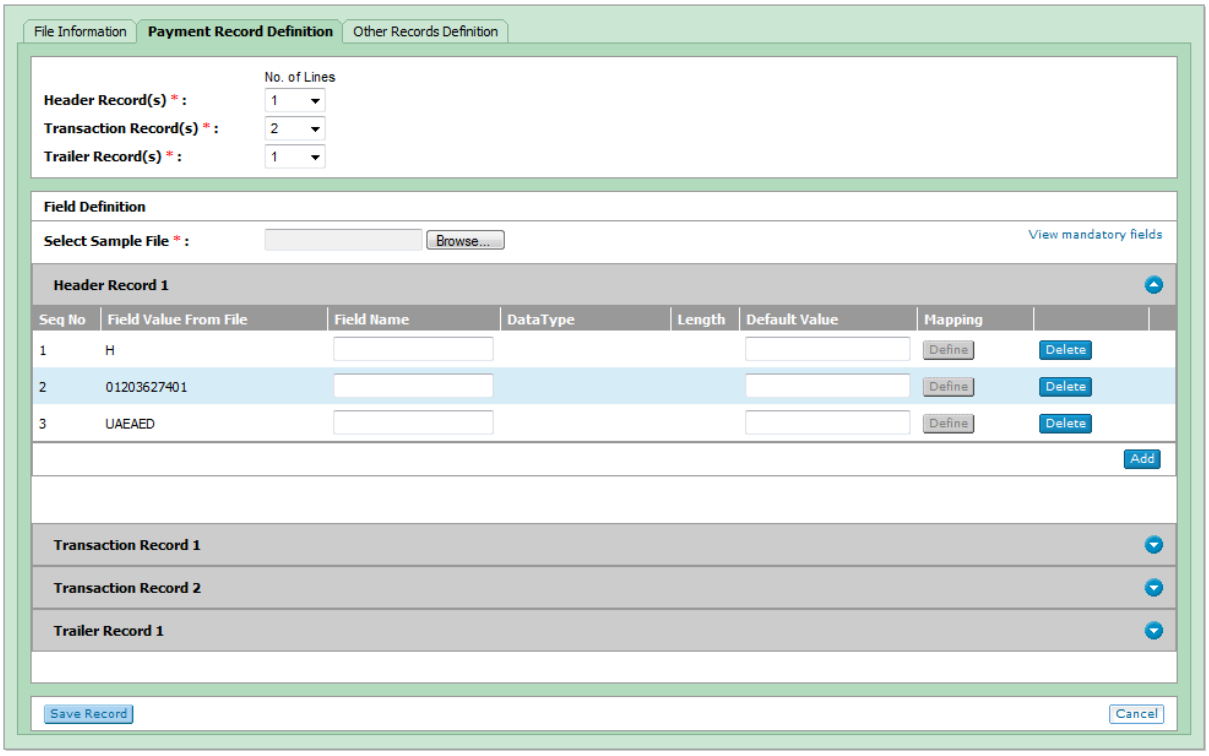


Field Name	Description
NO. OF LINES → HEADER RECORD(S)	Number of payment header lines where payment values can be read from. Default is 0, max is up to 5 lines
NO. OF LINES → TRANSACTION RECORD(S)	Number of parts of a payment line where payment values can be read from. Default is 1, max is up to 10 lines
NO. OF LINES → TRAILER RECORD(S)	Number of parts of a payment trailer lines where payment values can be read from. Default is 0, max is up to 5 lines

After having defined the structure of the file, the user must browse and import a sample file in order to help define the fields. **Only .txt, .csv, .xls and .xlsx files can be imported.** The sample file must me limited to a maximum of 500 kilobytes, and should be as comprehensive as possible so that all the possible fields of the file's structure are taken into account during the creation of the template.

After the import, the system will automatically parse suggested fields in each record layer, and display the sample file's contain as individual records.

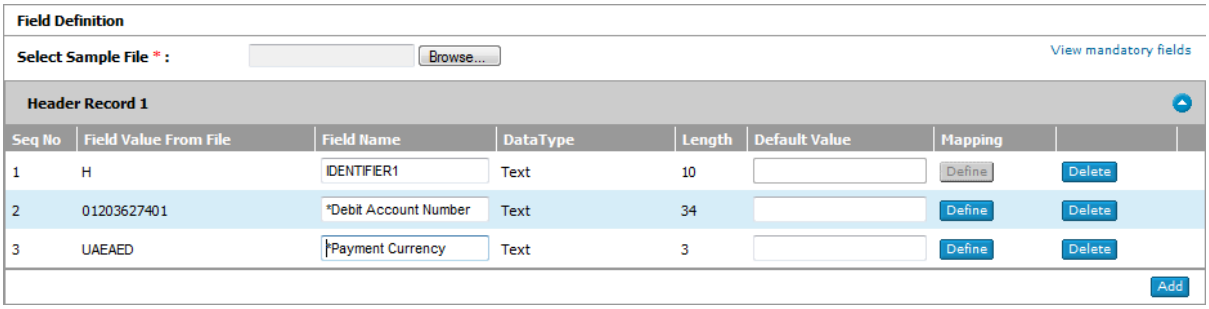
The user can click on the 'Expand' button ( ) to view the details of each record.



The mapping exercise continues with the selection of the appropriate "Field Name" for each field in the record.

Column Name	Description
SELECT SAMPLE FILE	Browse and select the sample file for which the structure is captured. The sample file should contain the exact number of lines and record types (in the same sequence) as that has been defined in the record level definition.
FIELD VALUE FROM FILE	In "New" mode, the values of the sample file's fields are displayed on this column based on the earlier "Field Seperator" definition. In "Edit" mode the column is empty.
FIELD NAME	Predefined payment field names selection are offered to the user to help define the field. The user can rely on a wild-card search feature and type in key words or characters to help select the relevant field name. Mandatory field names are prefixed with "*".
DATA TYPE	It's a non-editable field which displays the type of the data. Typical values "Text", "Number" or "Date".
LENGTH	It's a predifined non-editable field which display the maximum length of the value of the related data.
DATE FORMAT	Applies to only date field. It defines how date data is represented in the input file.
DEFAULT VALUE	User will have the option to key in field value for the field selected. The value provided will be used if no data is provided in the input file for the relevant field; on the other hand, if a data is available on the the file, then the default value will be ignored.

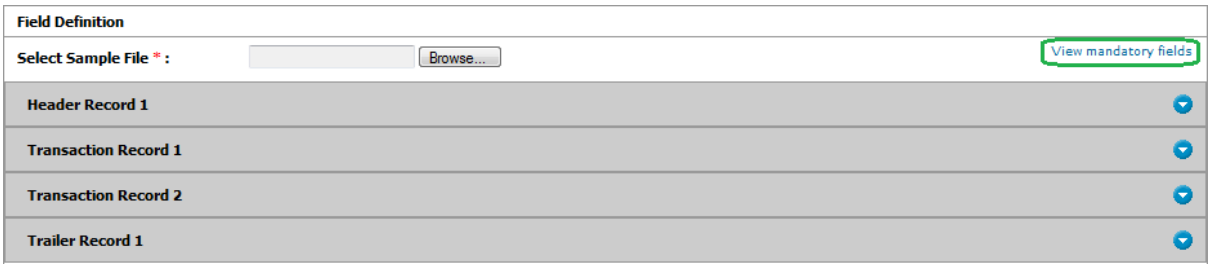
Once a field is selected under the "Field Name", the data's type and length are auto-displayed by the system. This will help the user verify the data in the input file and make necessary corrections immediately.

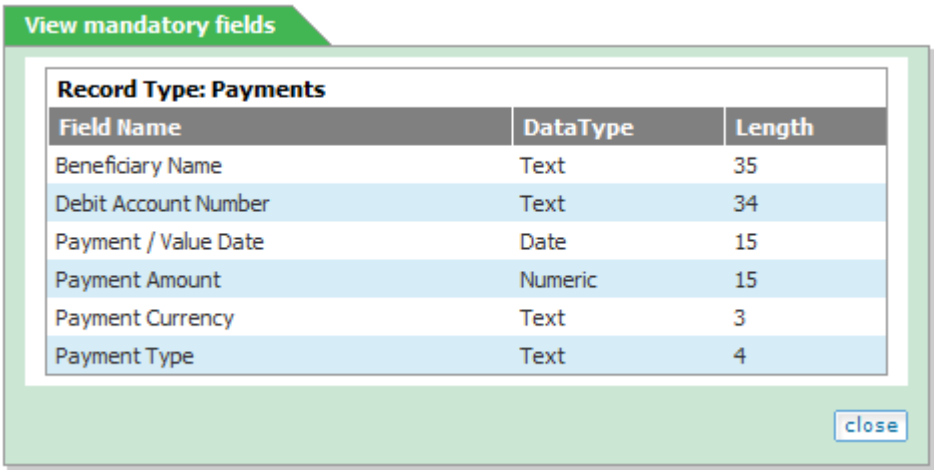


2.1 Mandatory "Field Name"

The mandatory fields are indicated with an asterix (*) mark as prefix and are listed at the top of the drop list of the "Field Name" column. To successfully carry out the mapping, all the mandatory "Field Name" must be allocated.

The list of mandatory field for a specific mapping is available by cliquing on the "View mandatory fields" link at the top right-hand corner.





For 'Payments', "Payments with Multiple Fields", and "Payment Without Identifier" products, the mandatory fields are:

- Beneficiary Name
- Debit Account Number

- Payment / Value Date
- Payment Amount
- Payment Currency
- Payment Type

For 'Payee' the following fields are mandatory:

- Beneficiary ID
- Beneficiary Name
- Debit Account Country Code
- Debit Account City Code

Conditional data for transactions has been deemed optional. The user should refer to the bank's IPayment CSV's specifications and his local country requirements in order to map the full set of required data.

For each record, an identifier (RECIDENTIFIER) is also considered as mandatory. An identifier is used to identify a specific line on a record in the input file. Thus, an identifier has to be defined for each line of the input file during the creation of the template; otherwise the user is prompted to provide the identifier. **The record identifiers must be unique and static**.

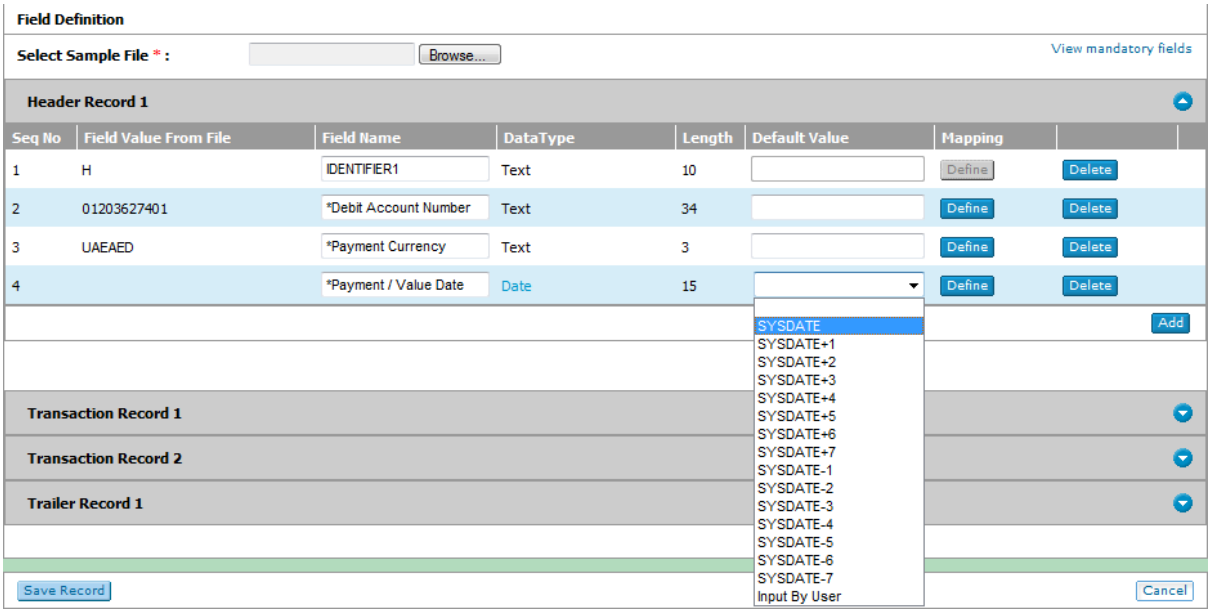
Identifiers are mandatory for 'Payments' and "Payments with Multiple Files sub-products". They are always mandatory for Transaction Records. However, they are not required for the header or the trailer if they have only one line (the number of lines for "Payment Header" and "Payment Trailer" is selected as "1").

Another identifier, the merger identifier (MRGIDENTIFIER), is applicable only to "Payments with Multiple Files" and is used to identify and merge payment and invoice files.

2.2 Adding a new field

If the input file does not contain any of the mandatory fields required by the bank, then a field can be added by clicking on the "Add" button (

).



For example, as illustrated above, to include the value date, the user can add a field by clicking the 'Add' button and type "Payment / Value Date" under the "Field Name" column. For date fields, the user can also select the format in which the date field should be interpreted.

2.3 Removing a field

To remove a field, the user can click the radio button against a field and click on "Delete" button (Delete).

2.4 Default values

Default values can be assigned for each field by providing a value under the "Default Value" column. The Default value can be configured only if no operations (see chapter 4) has been performed on the field. For the date field, user will have the option to select the default data from the dropdown list. The value date can be defaulted to a fixed date, e.g. System date, System date + 2 etc.

2.5 Additional provision for "Field Name"

Apart from standard payment field there is a provision to help the user create its own field: a 'FILLER'. A 'FILLER' field has empty input or default value, and can be derived from different fields (see chapter 4 on how to apply special mapping operations to fields). It is used to store a data which would be used for further operations, or the result of these operations.

2.6 Unnecessary data

Data contained in the input file but which are not relevant to performed the transaction can remain "undefined". Thus, the tool will only process the defined data, and the unnecessary ones will be ignored. The user can handle these unnecessary data in two ways:

- Use 'FILLER' (see the section 2.5 above) in the "Field Name"; or,

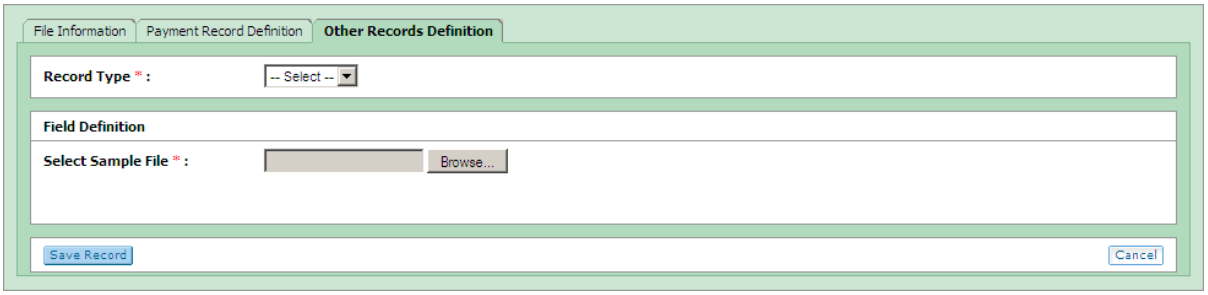
- *If the unnecessary data are the last ones on their record line*, they can merely be ignored. For instance, if there are 20 fields in the record (header record, transaction record, or trailer record), and only the first 10 fields of the record are required, then the last 10 are unnecessary and no "Field Name" needs to be attached to them.

Once all the fields are mapped to the corresponding fields under the "Field Name" column, the user can click on "Save Record" (Save Record) to save the template.

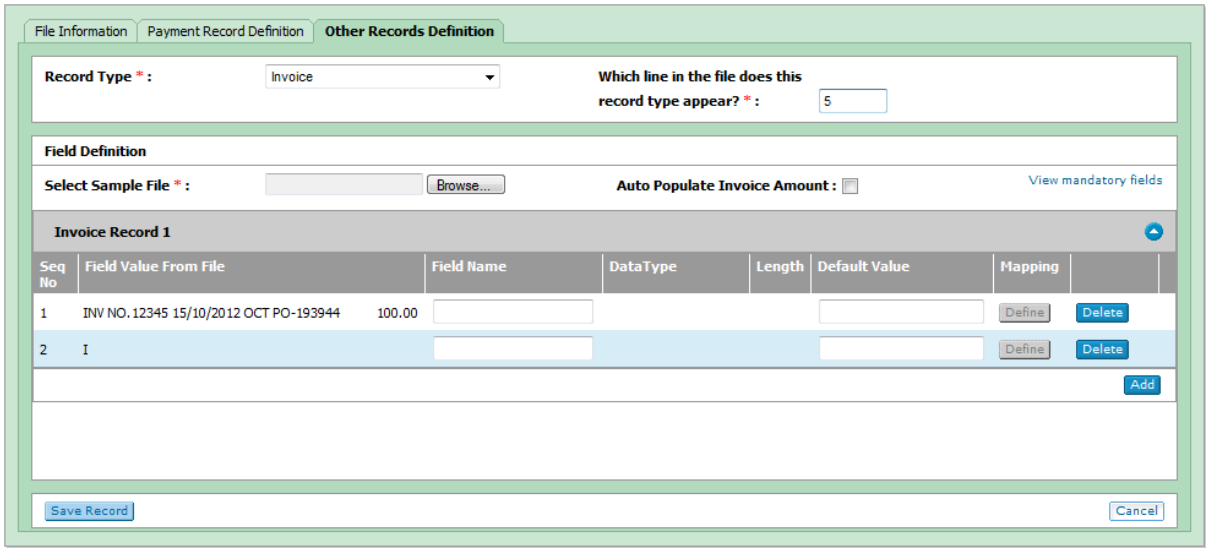
3. Other Records Definition screen for a delimited file type

The "Other Records Definition" tab is available for "Payments" or "Payments with Multiple Files" sub-products. Under the "Other Records Definition", the user can map the below record types:

- Invoice records
- FX Contract records
- Document Checklist (for Thailand only)
- Regulatory Details (for China only)



When 'Invoice' option is selected under the "Record Type" dropdown list, the user is asked to identify which line in the input file does the invoice record appears on.

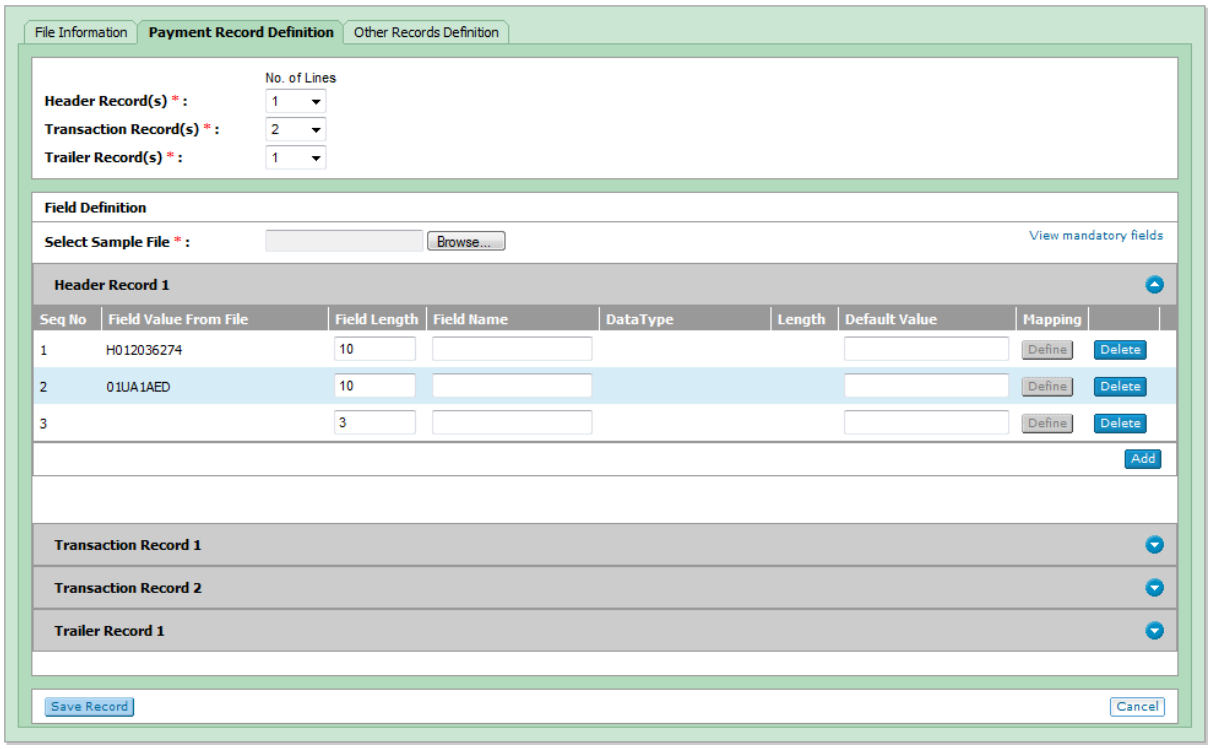


Based on the user input and the sample file uploaded, the system will parse the invoice record. The user can then map the parsed information to the invoice related fields.

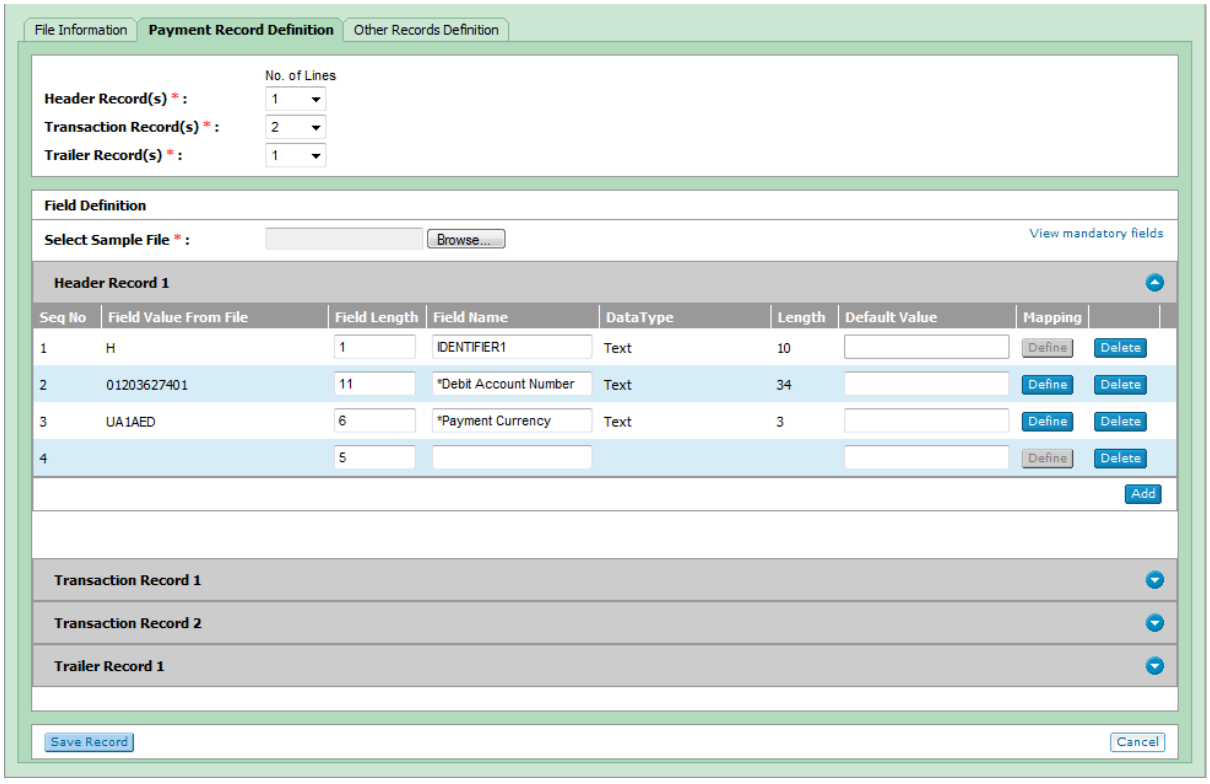
Field Name	Description
RECORD TYPE	Type of record relevant to the 'SubProduct' defined in main screen.
WHICH LINE IN THE FILE DOES THIS RECORD TYPE APPEAR?	This entry allows to point out the line where the invoice record is located in the sample file
FIELD DEFINITION → SELECT SAMPLE FILE	Browse and select the file from which file structure has to be captured.
AUTO POPULATE INVOICE AMOUNT	Available for Invoice Record Type only. If selected, the amount of the invoice (for the 1st invoice line item) will be populated from the payment amount; for the remaining invoice line items, the invoice amounts will be mapped as 0.00.
FIELD VALUE FROM FILE	In "New" mode, the values of the sample file's fields are displayed on this column based on the earlier "Field Seperator" definition. In "Edit" mode the column is empty.
FIELD NAME	Predefined payment field names selection are offered to the user to help define the field. Mandatory field names is prefixed with "*".
DATATYPE	It's a non-editable field which displays the type of the data.
LENGTH	It's a predifined non-editable field which displayx the maximum length of the value of the related data.
DATE FORMAT	Applies to only date field. It defines how how date data is represented in the input file.
DEFAULT VALUE	User will have the option to key in field value for the field selected.

4. Record level definition for fixed length files

Fixed length files are those in which data are placed next to each other without separators or wrappers. For these files, the user must perform the same steps as for Delimited files until uploading a sample file, and select "Fixed Length" for the file format type.



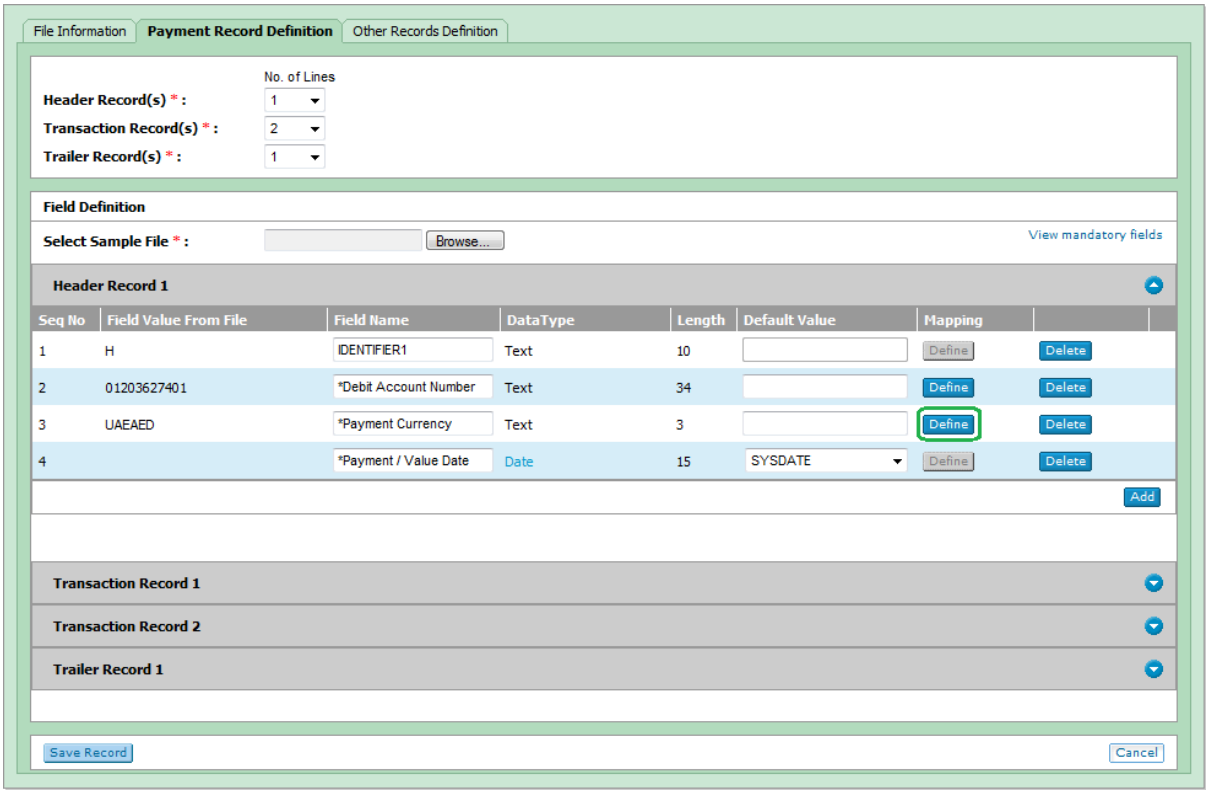
Once the sample file is imported, the system splits each record by strings of 10 characters (with fields' lengths defaulted to 10). The user can then overwrite the default length with the actual length of the data fields and the system will auto-adjust the "Field Value From File" accordingly.



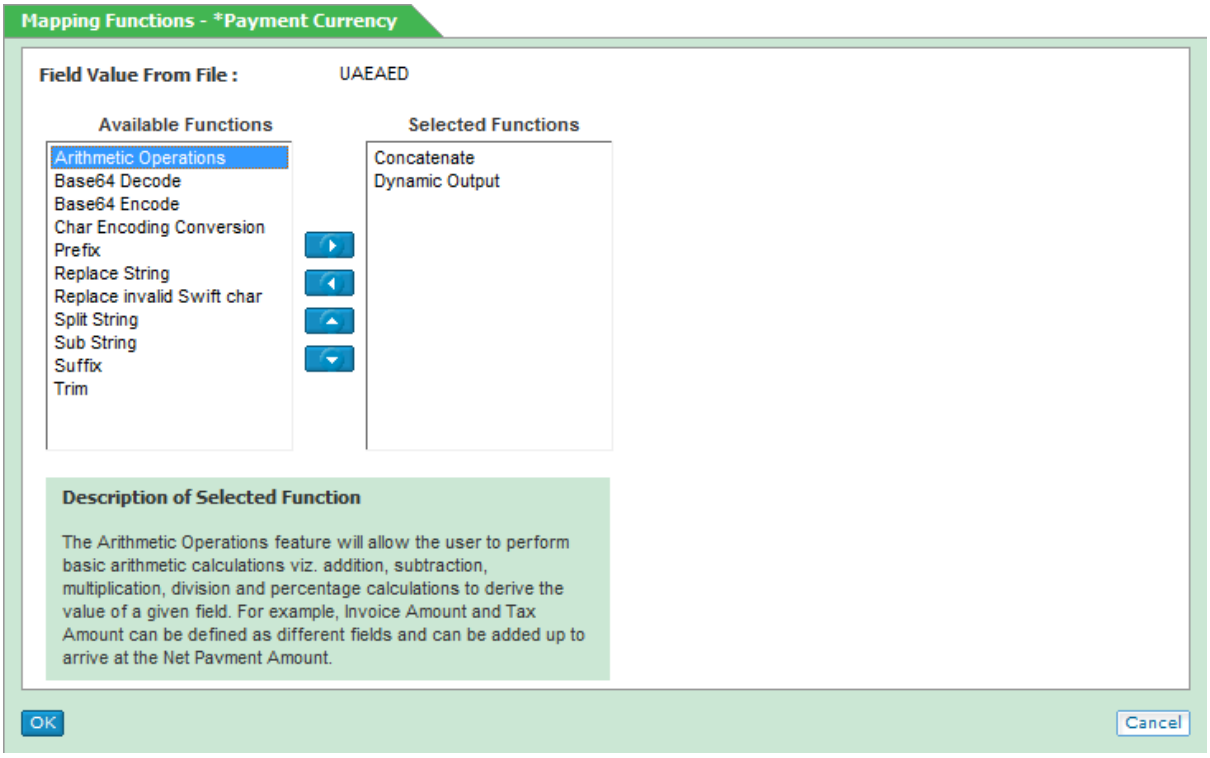
Once done, the user can proceed with allocation the field names and the rest of the mapping as previously explained.

CHAPTER 4: SPECIAL MAPPING FUNCTIONS

Special mapping functions are designed to further refine the definition of fields pertaining to the transaction file. Any number of operations can be performed on a field and user can re-sequence the order of operations to be executed. But only fields on which no prior operations have been performed are eligible for special mapping functions' operations.



Special functions are available under the "Mapping Functions" layer which is displayed once the user presses the 'Define' button (Define) for the related field.

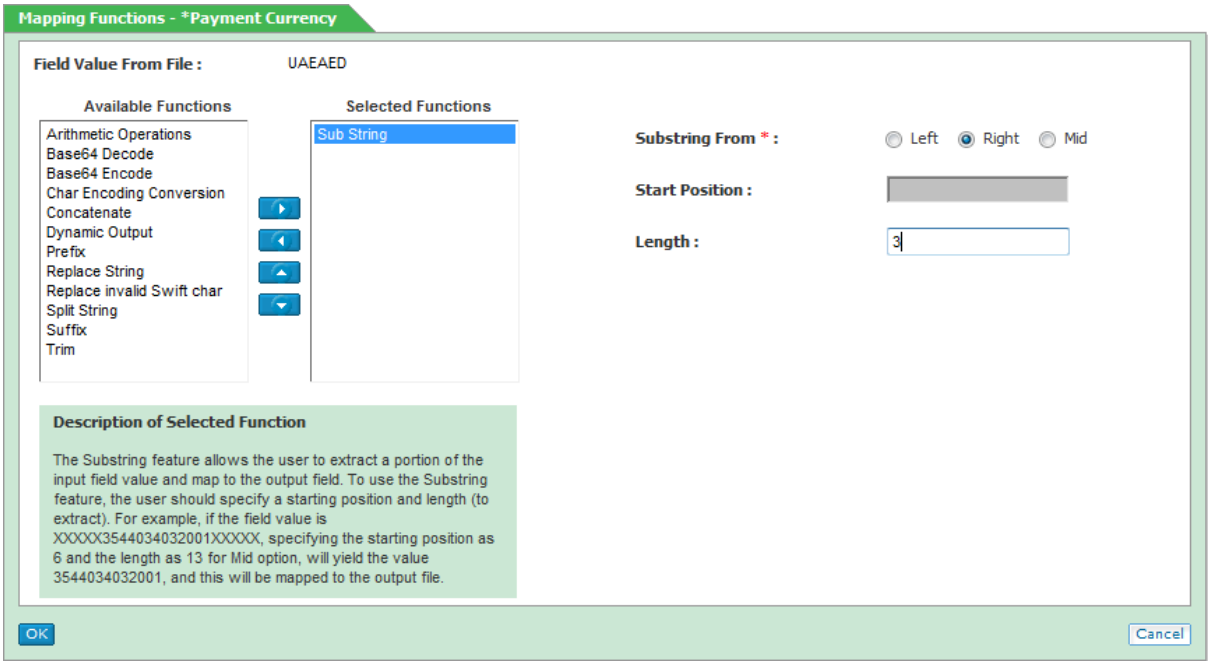


The Mapping Function window's title specifies the field for which the special function will be applied. On the top left corner of the window, the input value of the field is indicated as per the sample file used. The user is also offered a detailed description of the function he selects.

Mutliple mapping function can be used simultaneously to further define the rules applicable to the selected field. The left and blue arrows (,) allow to select and deselect a mapping functions applicable to the field. Clicking on each of the selected functions enables the definition layer for the related function, while the up and right arrows (,) allow to define the priority by which the rules of the selected functions will be applied.

1. Sub String function

The Substring function allows the user to extract a portion of the input field value and map it to the output file.



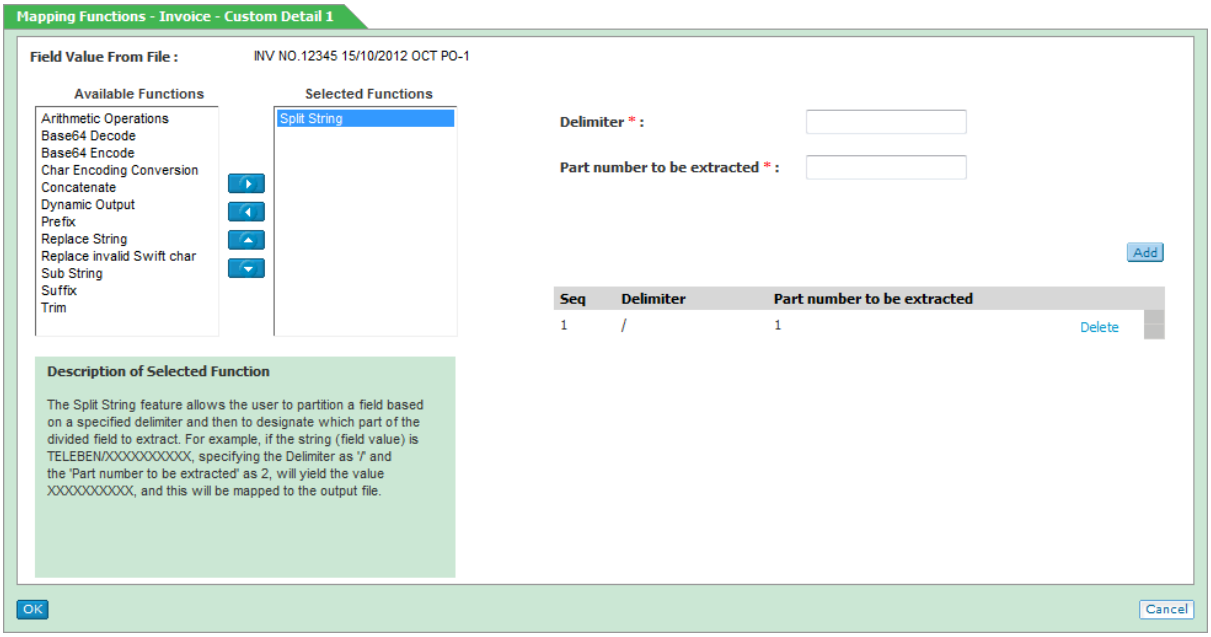
To use the substring feature, the user should specify a starting position on the field and length of the string to be extracted.

Field Name	Description
SUBSTRING FROM	"Left", "Right" or "Mid" options will be available for selection.
START POSITION	Key in positive number as start position to extract the value. The field will be disabled if user selects "Left" or "Right" option from "Substring From".
LENGTH	Length of the string to be extracted from input field.

For example, if the field value is XXXXX3544034032001XXXXX, selecting the substring from Mid, and specifying the starting position as 6 and the length as 13, will yield the value 3544034032001, which will be mapped to the output file.

2. Split String

The Split String feature allows the user to partition a field based on a specified delimiter and then to designate which part of the divided field to extract.



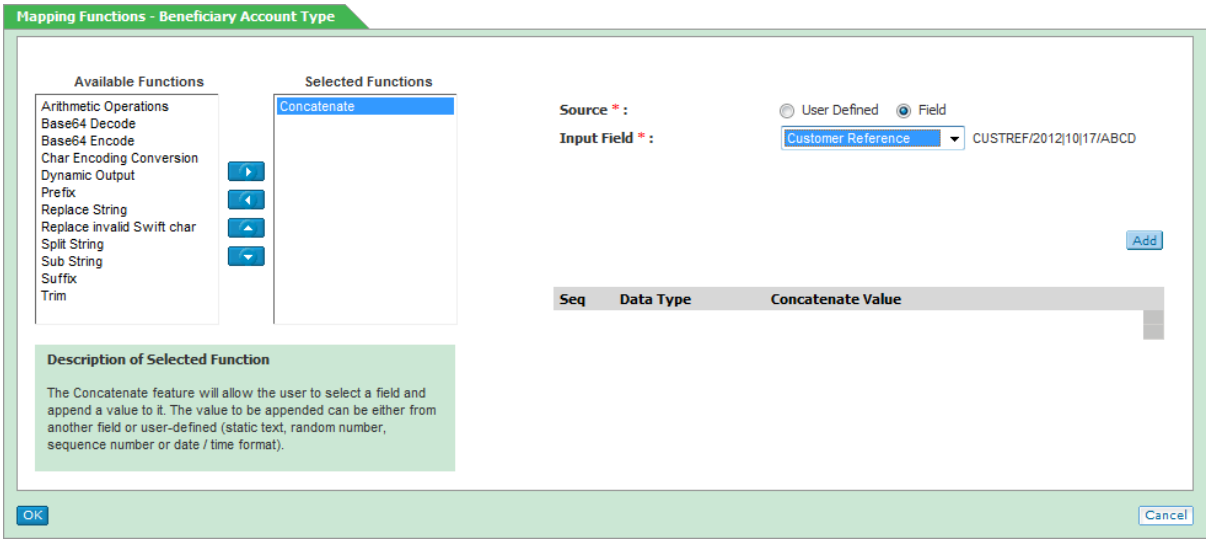
Field Name	Description
DELIMITER	Charater use as seperator within the selected string (field). The <space> character can be used as delimiter as well.
PART NUMBER TO BE EXTRACTED	Portion of the string to be extracted after applying delimiter.

For example, if the string (field value) is /TELEBEN/XXXXXXXXXX, specifying the delimiter as '/' and the sequence as 2, will yield the value XXXXXXXXXX, and this will be mapped to the output file.

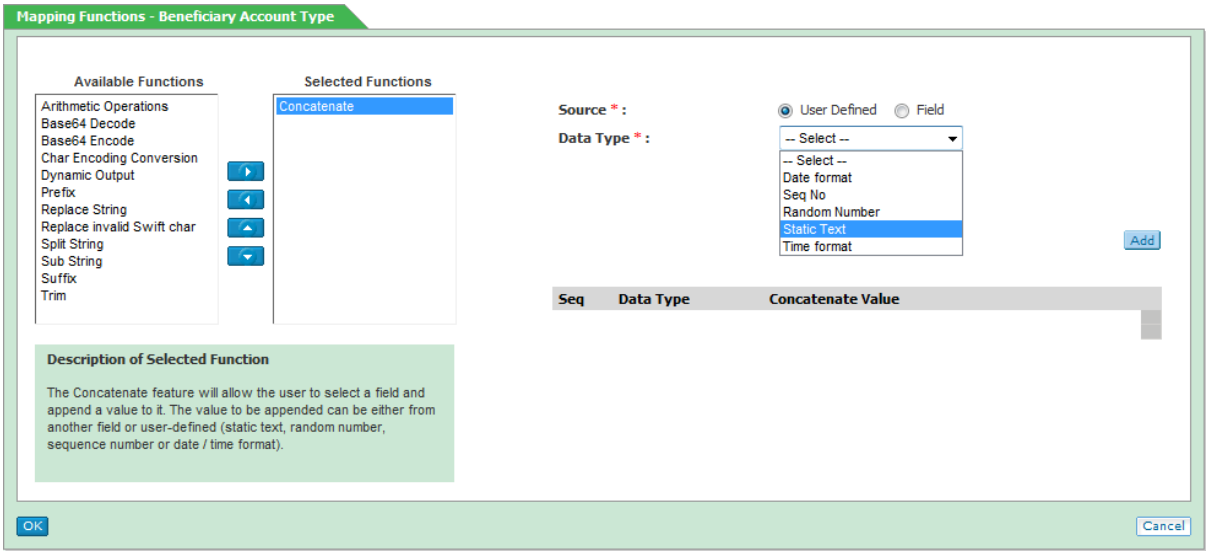
Multiple "Split String" operations can be configured successively. In that case, operations will be executed in sequence whereby, the output of first Split String operation will be input for next Split String operation. Click on 'Add' (Add) to validate the rule.

3. Concatenate

The Concatenate feature allows the user to select a field and append a value to it. The value to be appended can be either from another field or user-defined (static text, random number, sequence number or date / time format).



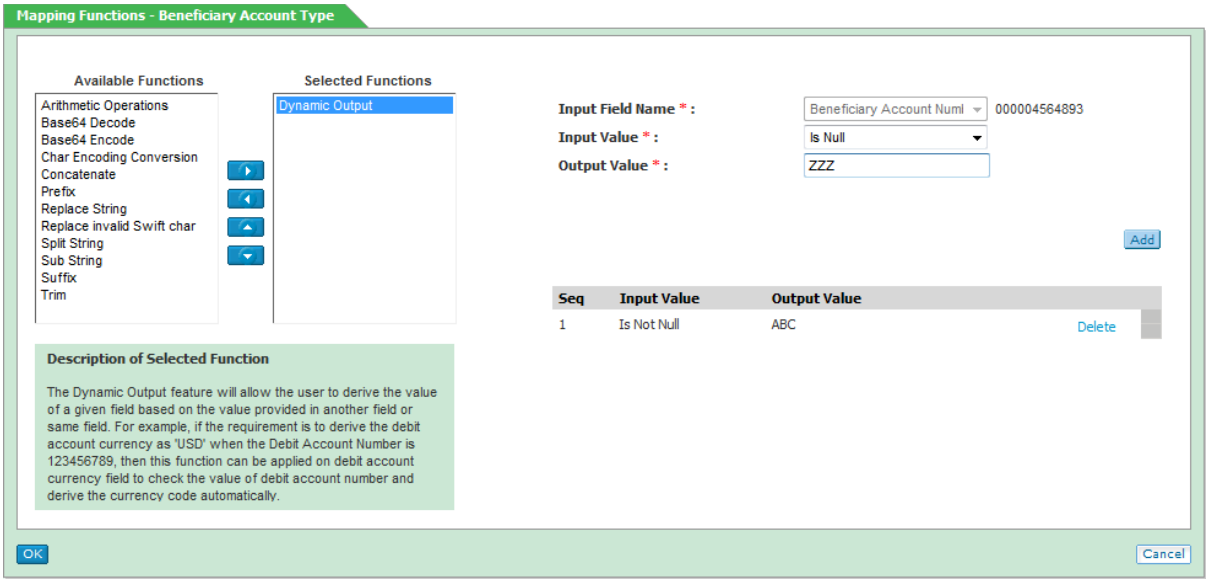
Field Name	Description
OPTION	The user can select from either of the two options "Input Field" or "Data Concatenation". More than one option can be selectd to perform the Concatenate.
INPUT FIELD / DATA TYPE	For "Input Field" option, a drop down field offers all field name listed by user in record definition. For "Data Concatenation" option, a drop down field offers the opportunity to pick up like "Static Text", "DateTime", 'Sequence' or 'Random Number'.
VALUE	This field will be enabled only if user selects "Data Concatenation" options. For ▪ Static Text -> user has to key in a value in input field ▪ Date Time -> user has to select the format from dropdown list box ▪ Seqence -> user has to define the start no. Sequence would be incremented by 1 for each record and would apply to all record in the file. For next file, Sequence will re-start from the value configured in the template ▪ Random Number -> user has to provide the random number length



Click on 'Add' (Add) to validate the rule.

4. Dynamic Output

The Dynamic Output feature allows the user to derive the value of a given field based on the value provided in another field. For example, if the requirement is to derive the debit account currency as 'USD' when the Debit Account Number is 123456789, then this function can be applied on debit account currency field to check the value of debit account number and derive the currency code automatically.



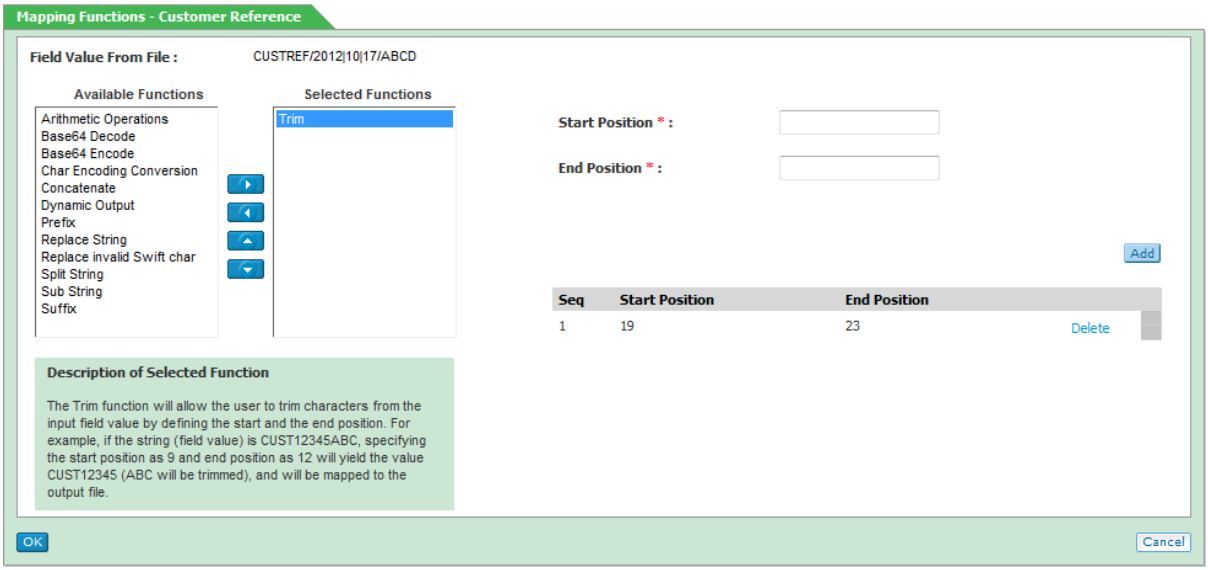
Field Name	Description
INPUT FIELD NAME	Fields from the Records' definition are available for selection.

INPUT VALUE	Conditional values offered to the client. The possible value are "Is Null", "Is NotNull", 'Default' or "User Defined". If 'User Defined' item is selected, then 'User Defined' field needs to be enabled for a "conditional" manual input from the user. The user can to default the value if no value condition is met.
OUTPUT VALUE	Output value to map based on corresponding input value

Click on 'Add' (Add) to validate the rule.

5. Trim

The Trim function allows the user to trim characters from the input field value by defining the start and the end position. For example, if the string (field value) is CUST12345ABC, specifying the start position as 9 and end position as 12 will yield the value CUST12345 (ABC will be trimmed), and will be mapped to the output file.



Field Name	Description
START POSITION	Define a non negative number which will be used as start position to truncate a string.
END POSITION	End Position should be greater than Start Position. Combination of Start and End positions will be used to truncate a portion from input data.

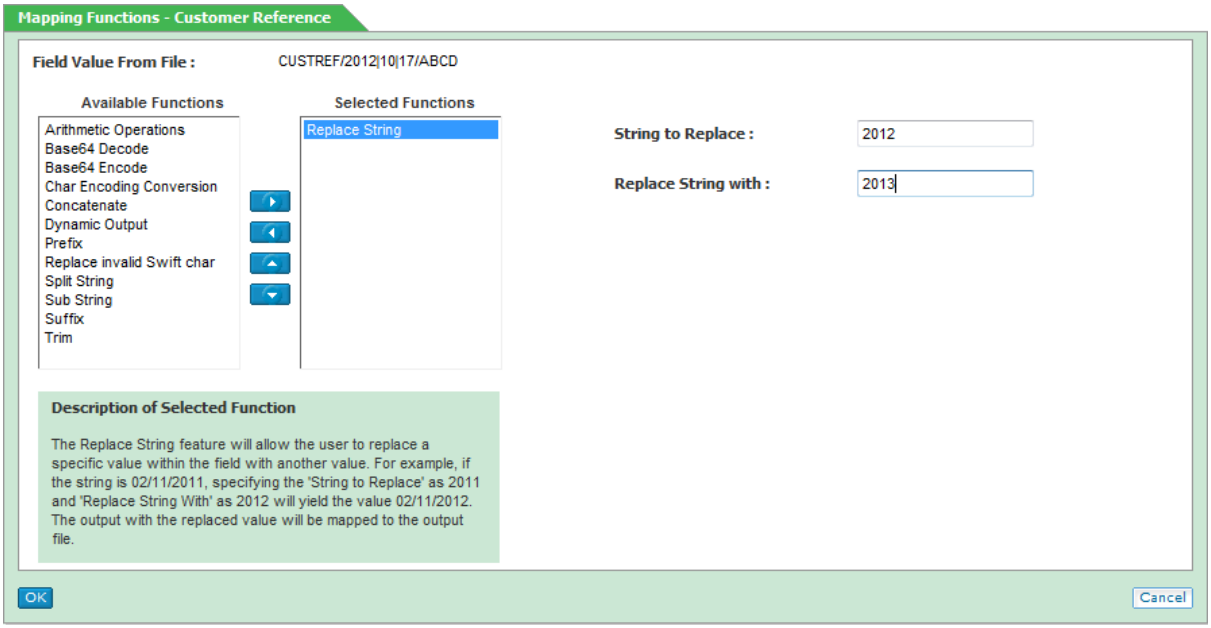
For multiple Trim rules, the operations will be executed in sequence whereby the output of first truncate operation will be input for next truncate operation.

For multiple definition, the position needs to be maintained as per original string. For instance, if the first 3 characters and last character need to trimmed, then the position will be defined as per the original position, not based on the first trim output.

Click on 'Add' (Add) to validate the rule.

6. Replace String

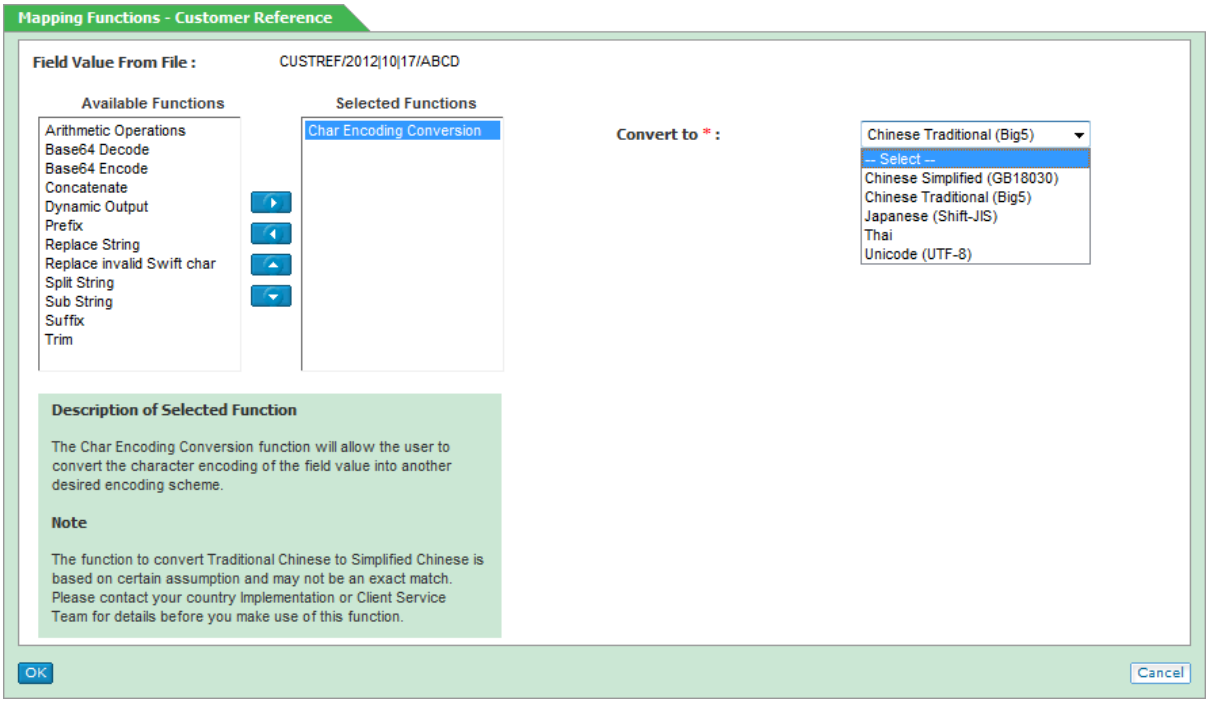
The Replace String feature allows the user to replace a specific value within a field and with another value.



Field Name	Description
STRING TO REPLACE	Character or a string to be replaced
REPLACE STRING WITH	Character or a string that will be used to replace the value in the input field

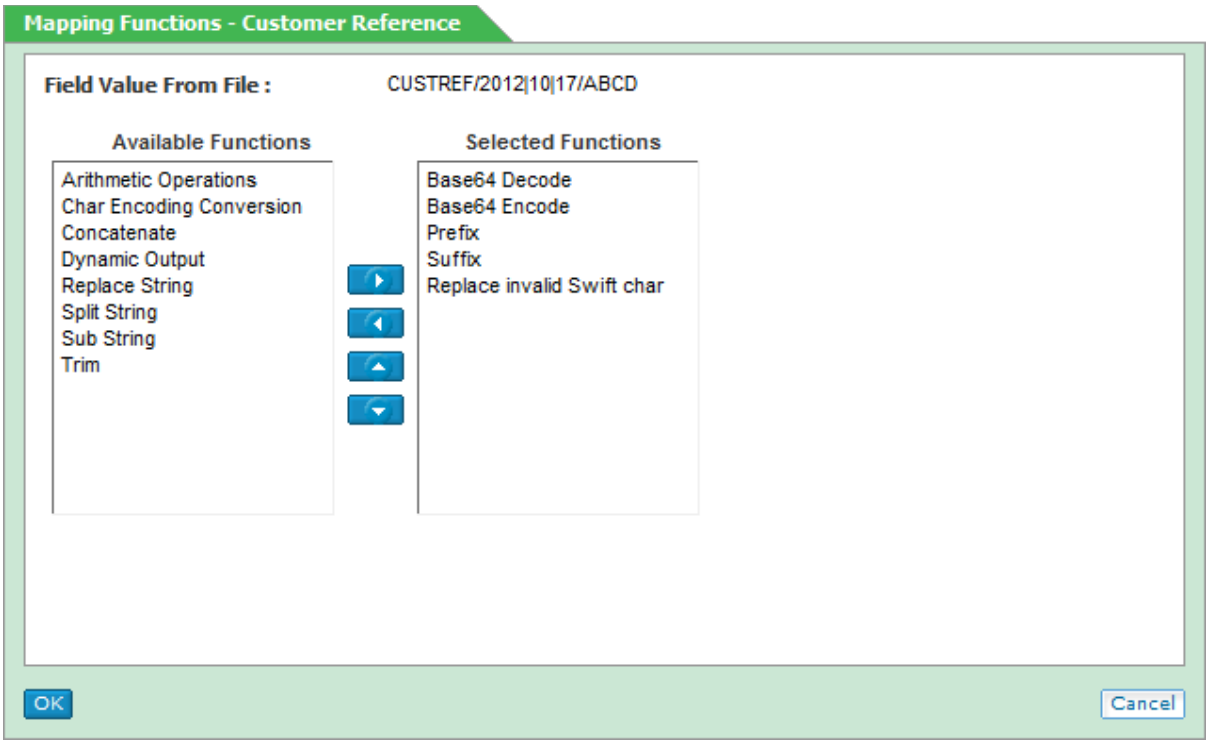
7. Char Encoding Conversion

The Char Encoding Conversion function allows the convertion of the encoding of the field value to another encoding scheme.



User can convert the characters to the following encodings: Chinese simplified, Chinese traditional, Japanese, Thai, and unicode.

8. Other String operations



1.1 Base64 Encode

The Base64 Encode function will convert the field value into Base64 encoding scheme.

1.2 Base64 Decode

The Base64 Decode function will decode the field value if already encoded with Base64 scheme.

1.3 Prefix

The Prefix function will allow the user to add a specific value before the selected field's value.

1.4 Suffix

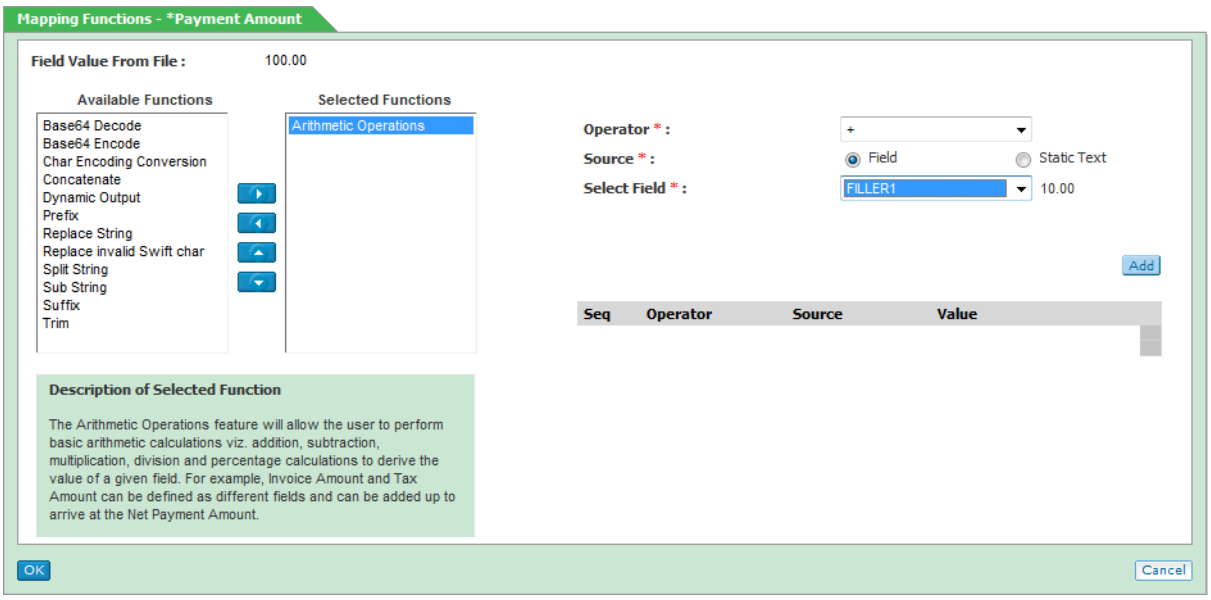
The Suffix function will allow the user to add a specific value at the end of the selected field's value.

1.5 Replace invalid Swift Char

This function allows to replace the following invalid SWIFT characters with a <space>: * ~ □ \ | ` ! @ # $ % _ { } [ ] ; " < > &.

9. Arithmetic Operations

The Arithmetic Operations feature is used to perform basic arithmetic calculations (addition, subtraction, multiplication, division and percentage calculations) in order to derive the value of a given field. Thus, information such as Invoice Amount and Tax Amount can be defined as different fields and can be added up to arrive at the Net Payment Amount.



Field Name	Description
OPERATOR	Operator list is made of '+', '-', '*', '/', '%' for addition, subtraction, multiplication, division and percentage calculations.
OPERAND	Data used for numeric operations. Options are "Input Field", "Static Text",

	"Round", "Truncate" & "Formatting".
SELECTED FIELD OR STATIC VALUE	For "Input Field" selected as "Operand", dropdown list box will display list of all fields available from the records' definition. For: ▪ Static Text -> user has to key in numeric value in input field ▪ Round -> user has to define the number of place after the decimal to round off ▪ Truncate -> user has to define the number of digits after decimal point to truncate ▪ Formatting -> user has to provide the number of digits formatting value

Click on 'Add' (Add) to validate the rule.

CHAPTER 5: PLUG N PLAY CAPABILITY

Straight2Bank Universal Adaptor features a broad set of readily available formats from industry standards, banks and major ERPs. By selecting the appropriate format within the library, clients can integrate overnight through a "plug n play" process, which reduces significantly the time and the effort required at both ends of the connection.

To get to use a standard template within the library, a request has to be raised to the Standard Chartered CBS team, which will in turn copy the template from the source group ID for the standard templates ***SCBUSRGP*** to the desired group ID.

CHAPTER 6: TEMPLATES AT WORK

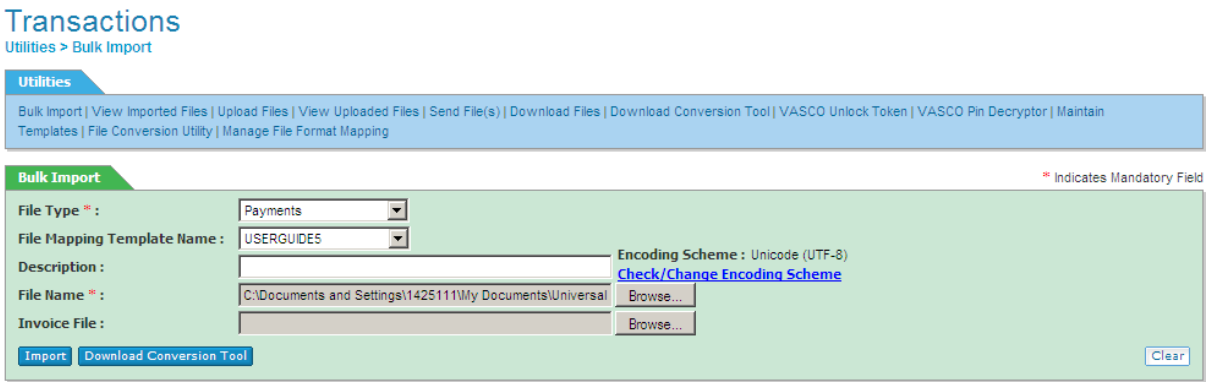
Once the template creation is completed, the client can start sending transaction files to Standard Chartered via the Web or throught an host-to-host connection. In each case, the transaction file will be paired with the template to facilitate the conversion of the message to file format understandable by the bank.

1. Web upload

With a template ID, the transaction file can be uploaded via Bulk Import or File Upload.

1.1 Bulk Import

Using the Bulk Import screen on Straight2Bank Web platform, the user can upload its transaction file, select the appropiate template, and push the file to the bank. The Bulk Import screen is accessible through ***Cash Management → Transactions → Utilities → Bulk Import***.


Transactions
Utilities > Bulk Import
Utilities
Bulk Import | View Imported Files | Upload Files | View Uploaded Files | Send File(s) | Download Files | Download Conversion Tool | VASCO Unlock Token | VASCO Pin Decryptor | Maintain Templates | File Conversion Utility | Manage File Format Mapping
Bulk Import
* Indicates Mandatory Field
File Type * :
Payments
File Mapping Template Name :
USERGUIDES
Description :
Encoding Scheme : Unicode (UTF-8)
Check/Change Encoding Scheme
File Name * :
C:\Documents and Settings\1425111\My Documents\Universal
Browse...
Invoice File :
Browse...
Import
Download Conversion Tool
Clear

1.2 File Upload

The File Upload screen is accessible through ***Cash Management → Transactions → Utilities → File Upload***. This option required a CBS configuration to enable the template id.

2. Host-to-host integration

For clients opting for a host-to-host client integration, a JH2H connectivity has to be set up between the clients' systems and the bank. As part of the setup, the delivery schedule will be established, and a specific folder (for the template ID) will be created for files which have to be paired with the template created.

Integration via any of the available H2H channels, including SwiftNet File Act, is also possible. In this case, a CBS configuration must be performed in order to create an APRF code.

ANNEXE A – UNIVERSAL ADAPTOR FIELD MAPPING CHANGES

<table>
<tr><th>Date of Change</th><th>Change Details</th></tr>
<tr><td>8th February 2015</td><td>
1. Affected Transaction Types : Cross Border Payments
2. Affected Countries : All
3. Field Name Changes :
<table>
<tr><th>S/No</th><th>UA Sub-Product</th><th>Original Field Name</th><th>New Field Name</th></tr>
<tr><td>1.</td><td>Payee</td><td>Payee Address 3 in BO</td><td>Beneficiary Country Code</td></tr>
<tr><td>2.</td><td>Payment</td><td>On Behalf Of Address 3</td><td>On Behalf Of - Country Code</td></tr>
<tr><td>3.</td><td>Payment</td><td>Beneficiary Address 3</td><td>Beneficiary Country</td></tr>
</table>
4. Mapping Requirement Change :
<table>
<tr><th>S/No</th><th>New Field Name</th><th>Original Field Mapping</th><th>New Field Mapping</th></tr>
<tr><td>1.</td><td>Beneficiary Country Code</td><td>This field carries the delta payee address details after Payee Address 1 and Payee Address 2.</td><td>This field should contain only the 2 digit ISO Country Code of the Payee. Any delta payee address should be contained within Payee Address 1 and Payee Address 2.</td></tr>
<tr><td>2.</td><td>On Behalf Of - Country Code</td><td>This field carries the delta address of the actual beneficiary for payment on behalf scenarios, after utilizing Address 1 and Address 2 fields.</td><td>This field should contain only the 2 digit ISO Country Code of the actual beneficiary for payment on behalf scenarios. Any delta beneficiary address data should be contained within Address 1 and Address 2 fields.</td></tr>
<tr><td>3.</td><td>Beneficiary Country</td><td>This field carries remaining Bene Address after address 1 and 2.</td><td>Specify Beneficiary Country name.</td></tr>
</table>
5. Additional Instructions :
a) Ensure your payment files include the country of the beneficiary and other address details. As the payment files are populated with the beneficiary data from your systems, ensure you have captured the relevant information.
b) If you are making the payment on behalf of another organization (OBO), please ensure you provide the name and address, including country code, in the payment of the organization on whose behalf you are making the payment
</td></tr>
</table>

17th April 2015

1. Affected Transaction Types : ID ACH Payments, MY NBPS
2. Affected Countries : ID, MY, TW
3. Field Name Changes :

S/No	UA Sub-Product	Original Field Name	New Field Name
1.	Payment	Receiver ID	Receiver ID / Beneficiary Identifier
2.	Payment	Receiver ID Type	Receiver ID Type / Beneficiary Type

4. Mapping Requirement Change :

S/No	New Field Name	Original Field Mapping	New Field Mapping
1.	Receiver ID / Beneficiary Identifier	This field is used for populating Receiver ID for TW use only	TW No change in usage ID ACH This field would also be used for populating Beneficiary Identifier for ID ACH transactions. MY NBPS This field would also be used by MY NBPS transactions for populating "Biller Code" information.
2.	Receiver ID Type / Beneficiary Type	This field is used for populating Receiver ID Type for TW use only	TW No change in usage ID ACH This field would also be used for populating Beneficiary Type for ID ACH use.

5. Additional Instructions :

NIL.